USB KVM Switch
with Audio & Ethernet Hub

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This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

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Introduction

Thank you for purchasing a StarTech.com USB KVM Switch with Audio and Ethernet Hub. A unique multimedia switching solution, this multi-function switch integrates a USB 2.0 hub, Ethernet Hub, and audio while supporting high-resolution VGA video interfaces.

Plus, the switch provides a built-in, 3 or 5 port 10/100 Mbps Ethernet Hub, allowing you to easily network and share an Internet connection among computers . All these features come in a rugged metal chassis with a compact form factor that won't waste your valuable desk space.

Features

- Bi-directional switching and flexible interoperability; switch permits in dependent PC, independent peripheral, and independent audio function, regardless of KVM switch focus
- Built-in 3 or 5 port 10/100 Mbps Ethernet switch allows you to easily network and share Internet with your computers
- Built-in USB 2.0 Hub allows peripheral sharing for printers, scanners, portable hard drives, etc., with data transfer rates of up to 480 Mbps
- Hot pluggable - add or remove computers without powering down the switch
- Supports Windows® 98/SE/ME/2000/XP/Vista™, Linux, MacOS, etc

Package Contents

- 1 x KVM Switch
- 1 x Firmware Upgrade Cable
- 1 x Power Adapter
- 1 x User Manual
- 2 x USB KVM Cables (SV231USBAN)
  4 x USB KVM Cables (SV431USBAN)

Hardware Requirements

Console:

- A VGA, SVGA, or Multisync monitor capable of the highest resolution that you will be using on any computer in the installation
- A standard 101/104 key USB style keyboard
- A standard 3-button USB style mouse

Computers:

The following equipment must be installed on each computer that is to be connected to the KVM Switch:

- A DE-15/VGA D-sub video port
- A Type A USB port for the keyboard/mouse combo USB cable
- A Type A USB port for the USB hub cable

Cables:

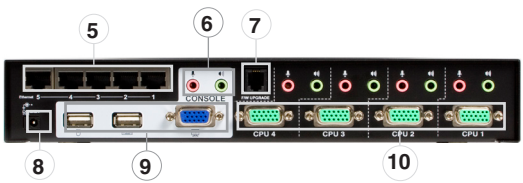
Please note that only Custom KVM cable sets specifically designed to work with this switch may be used. Two (SV231USBAN), or four (SV431USBAN) 1.8m cable sets are provided with this package

Hardware Guide

SV231USBAN
Front Panel

SV431USBAN
Front Panel

SV231USBAN/SV431USBAN**
Rear Panel



Please note that the SV431USBAN rear panel is identical to that of SV231USBAN, with the exception of the number of the audio and slave connection ports.

For an explanation of the functions corresponding to the numbered components listed above, please see the charts on the following pages.

Hardware Guide - Cont'd

	Component	Description	
1	Port Selection Switches	Pressing a switch brings the focus to the computer attached to its corresponding port.	
2	Port LEDs	**Upper:** **KVM**	**DIM ORANGE** indicates the computer attached to its corresponding port is up and running (On Line). **BRIGHT ORANGE** indicates the computer attached to the corresponding port is the one that has the KVM focus (Selected). Flashes to indicate that the computer attached to the corresponding port is being accessed under Auto Scan mode.
		Lower: **USB**	**DIM GREEN** indicates there is a USB cable connection to the computer attached to the corresponding port. Does not light if there is no USB connection to the computer. **BRIGHT GREEN** to indicate the computer attached to the corresponding port has access to the USB peripherals.
3	Ethernet LEDs	Indicate data transmission status of corresponding ports on the Ethernet hub:	
		LAN Link	**Off:** No data connection to the computer attached to its corresponding port. **On:** Data connection to the computer attached to the corresponding port is detected. **Flashing:** Data is being transmitted through the port.
		10/ 100Mbps	Off: Data transmission speed is 10Mbps. On: Data transmission speed is 100Mbps.
4	USB Hub Section	USB peripherals can plug into either port.	

Hardware Guide - Cont'd

	Component	Description
5	**Ethernet Port Section**	The CAT5 LAN cable that connects to the computer's Ethernet port can plug into any available port.
6	**Console Audio Jacks**	The cables from your microphone and speakers plug in here. Each jack is color coded and marked with an appropriate icon to indicate itself.
7	**Firmware Upgrade Port**	The Firmware Upgrade Cable that transfers the firmware upgrade data to the SV231USBAN / SV431USBAN plugs in here.
8	**Power Jack**	The power adapter cable plugs into this jack.
9	**Console Port Section**	Your USB keyboard, USB mouse, and monitor plug in here.
10	**CPU Port Section**	The cables that link the switch to your computers plug in here. Each CPU port is comprised of a microphone jack, speaker jack, and KVM data connector.

Please note: The shape of these 15-pin connectors has been specifically modified so that only KVM cables designed to work with this switch can be connected). Do NOT attempt to use ordinary 15 pin VGA connector cables to link these ports to the computers.

Installation

Warning! Make sure that power to all of the devices you will be connecting to the KVM switch, has been turned off."

To set up your SV231USBAN/SV431USBAN KVM Switch, refer to the installation diagram on the following page, which corresponds with the following steps:

1. Plug your keyboard, mouse and monitor into the Console Ports located on the unit's rear panel.
2. Plug your microphone and speakers into the Console microphone and speaker jacks located on the unit's rear panel.
3. Using a KVM cable set (included), plug the custom SPHD connector into any available CPU Port on the KVM switch. Plug the accompanying microphone and speaker connectors into the corresponding audio ports for that CPU Port.

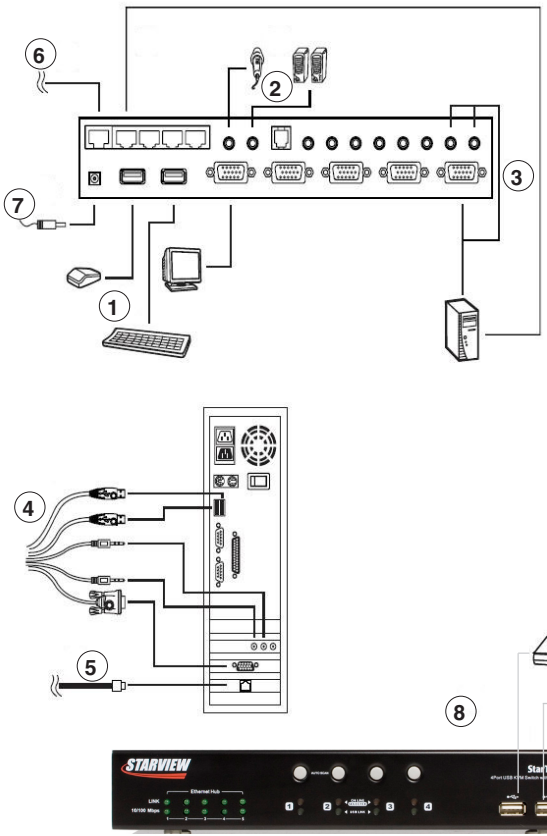
Please Note:

A. The audio connectors and jacks are color coded and marked with an appropriate icon for easy installation.

B. Be sure that the audio connectors on the KVM cable set are plugged into the same CPU Port number on the KVM switch.

4. At the other end of the KVM cable, plug the USB keyboard/mouse, USB hub, video, microphone and speaker cables into their respective ports on the computer.
5. Use CAT5 cable to connect an available Ethernet port on the KVM switch to the computer's Ethernet port. Repeat steps 3-5 for any other computer you are connecting to the KVM switch.
6. Plug the cable from your external LAN source into any available Ethernet port on the switch.
7. Plug the power adapter that came with the KVM switch, into an AC power source, then plug the power adapter's DC plug into the KVM switches DC jack.
8. Plug your USB peripherals into the USB hub section on the front panel.

Cable Connection



Port Numbering

Each CPU port on the SV231USBAN / SV431USBAN switch is assigned a port number (1 or 2 for the SV231USBAN; 1 to 4 for the SV431USBAN). The port numbers are marked on the rear panel of the switch.

The Port ID of a computer is derived from the CPU port number to which it is connected. For example, a computer connected to CPU port 2 has a Port ID of 2. The Port ID is used to specify which computer gets the KVM, USB hub, and audio focus with the Hotkey port selection method.

Powering Off and Restarting

If it becomes necessary to Power Off the KVM Switch unit do the following:

1. Power off the switch, then unplug the KVM cables from the switch's rear panel as well as the power adapter cable.
2. Wait 10 seconds, then reconnect the KVM cables.
3. Plug the switch's power adapter cable back in.

Hot Plugging

The SV231USBAN / SV431USBAN supports USB hot plugging. As such, computers can be removed and added back into the installation by unplugging their cables from the CPU ports without the need to shut the unit down.

Operation

There are two convenient methods to switch the KVM, USB hub, and audio focus among the ports: Manual - which involves pressing the pushbutton port selection switches located on the unit's front panel; and Hotkey - which involves entering combinations from the keyboard.

Manual Port Switching

Press and release a switch (for less than three seconds) to bring only the KVM focus to the computer attached to its corresponding port.

Press a switch for longer than three seconds to bring the KVM, USB hub, and audio focus to the computer attached to its corresponding port.

Press switches 1 and 2 simultaneously for 2 seconds to start Auto Scan-Mode.

Hotkey Port Switching

All hotkey commands begin with tapping the Scroll Lock key twice. The tables on the following pages describe the actions that each combination performs.

Please Note: If using the Scroll Lock key conflicts with other programs running on the computer, the Ctrl key can be used, instead. See Alternate Port Switching Keys, p.13, for details.

Cycling Through the Ports

Hotkey	Action
[Scroll Lock] [Scroll Lock] [Enter]	Shifts the KVM, USB hub, and audio focus to the next port on the installation (1 to 2; 2 to 1 for the SV231USBAN; 1 to 2; 2 to 3; 3 to 4; 4 to 1 for the SV431USBAN). **Note:** The KVM, USB hub, and audio focus all go to this port even if they were on different ports originally..

Cycling Through the Ports - Cont'd

[Scroll Lock] [Scroll Lock] [K] [Enter]	Brings only the KVM focus from the port that currently has it to the next port on the installation. The USB hub and audio focus remain where they are.
[Scroll Lock] [Scroll Lock] [U] [Enter]	Brings only the USB hub focus from the port that currently has it to the next port on the installation. The KVM and audio focus remain where they are.
[Scroll Lock] [Scroll Lock] [S] [Enter]	Brings only the audio focus from the port that currently has it to the next port on the installation. The KVM and USB hub focus remain where they are.

Going Directly to a Port

Hotkey	Action
[Scroll Lock] [Scroll Lock] [n] [Enter]	Brings the KVM, USB hub, and audio focus to the computer attached to the port corresponding to the specified Port ID. Note: The KVM, USB hub, and audio focus all go to this port even if they were on different ports originally.
[Scroll Lock] [Scroll Lock] [n],[K] [Enter]	Brings only the KVM focus to the computer attached to the specified port. The USB hub and audio focus remain where they are.
[Scroll Lock] [Scroll Lock] [n] [U] [Enter]	Brings only the USB hub focus to the computer attached to the specified port. The KVM and audio focus remain where they are.
[Scroll Lock] [Scroll Lock] [n] [S] [Enter]	Brings only the audio focus to the computer attached to the specified port. The KVM and USB hub focus remain where they are.

Going Directly to a Port - Cont'd

[Scroll Lock] [Scroll Lock] [n] [K] [U] [Enter]	Brings the KVM and USB hub focus to the computer attached to the specified port. The audio focus remains where it is.
[Scroll Lock] [Scroll Lock] [n] [K] [S] [Enter]	Brings the KVM and audio focus to the computer attached to the specified port. The USB hub focus remains where it is.
[Scroll Lock] [Scroll Lock] [n] [U] [S] [Enter]	Brings the USB hub and audio focus to the computer attached to the specified port. The KVM focus remains where it is.

Please note: The **n** stands for the computer's Port ID number. Replace the n with the appropriate Port ID when entering hotkey combinations.

Auto Scanning

The SV231USBAN / SV431USBAN's Auto Scan feature automatically cycles the KVM focus through the computer ports at regular intervals. This allows you to monitor the computer activity without having to take the trouble of switching from port to port manually. See the table below for details.

Hotkey	Action
[Scroll Lock] [Scroll Lock] [A] [Enter]	Starts Auto Scan. The KVM focus cycles from port to port at 5 second intervals.
[Scroll Lock] [Scroll Lock] [A] [n] **[Enter]**	Starts Auto Scan. The KVM focus cycles from port to port at n second intervals.

To exit Auto Scan Mode, press the Esc key, the Spacebar, or any Port Selection switch.

Please Note:

The n stands for the number of seconds that the SV231USBAN / SV431USBAN should dwell on a port before moving on to the next. Replace the n with a number between 1 and 99 when entering this hotkey combination.

Although the video focus switches from port to port, the keyboard, mouse, audio and USB focus doesn't switch. They stay at the port they were on when Auto Scanning started.

While Auto Scan Mode is in effect, ordinary keyboard functions are suspended - only Auto Scan Mode compliant keystrokes can be input. You must exit Auto Scan Mode in order to regain normal control of the keyboard.

Hotkey Setting Mode (HSM)

Invoking Hotkey Setting Mode

Hotkey Setting Mode is used to set up your SV231USBAN / SV431USBAN switch configuration. All operations begin with invoking Hotkey Setting Mode (HSM). To invoke HSM do the following:

1. Press and hold down the Num Lock key
2. Press and release the minus key
3. Release the Num Lock key

When HSM is active, the Caps Lock, and Scroll Lock LEDs flash in succession to indicate that HSM is in effect. They stop flashing and revert to normal status when you exit HSM.

Ordinary keyboard and mouse functions are suspended - only Hotkey-compliant keystrokes and mouse clicks (described in the sections that follow), can be input.

At the conclusion of some hotkey operations, you automatically exit HSM.

With some operations, you must exit manually. To do so, press the Esc key, or the Spacebar.

Alternate HSM Invocation Keys

An alternate set of HSM invocation keys is provided in case the default set conflicts with programs running on the computers. To switch to the alternate HSM invocation set, do the following:

1. Invoke HSM (see p.12)

2. Press and release the H key

The HSM invocation keys become the Ctrl key and F12 (instead of Num Lock and minus).

Please Note: This procedure is a toggle between the two methods. To revert back to the original HSM invocation keys, invoke HSM, then press and release the H key again.

Alternate Port Switching Keys

The port switching activation keys can be changed from tapping the Scroll Lock key twice ([Scroll Lock] [Scroll Lock]) to tapping the Ctrl key twice. To change the port switching activation keys, do the following:

1. Invoke HSM (see p.12)

2. Press and release the T key

Please Note: This procedure is a toggle between the two methods. To revert back to the original [Scroll Lock] [Scroll Lock] method, invoke HSM, then press and release the T key again.

Keyboard Operating Platform

The SV231USBAN / SV431USBAN's default port configuration is for a PC Compatible keyboard operating platform. If your requirements call for different port settings (you have a Mac or Sun attached to a port, e.g.), you

can change a port's keyboard operating platform configuration as follows:

1. Bring the KVM focus to the port you want to set.
2. Invoke HSM (see p. 12)
3. Press and release the appropriate Function key (see table). After completing a setting, you automatically exit HSM.

Function Key	Operation
F2	Sets the Mac keyboard operating platform.
[F3]	Sets the Sun keyboard operating platform.
[F10]	Auto detects the keyboard operating platform (for PC compatible systems). Activates Pass Through keyboard mode (keystrokes are sent directly to the computer instead of through the Mac or Sun emulator).

Please Note: The first time that the Sun system runs from a port, you must configure its port for the Sun keyboard operating platform before you turn the system on, or else the Sun system will not start.

List Hotkey Settings

To see a listing of the current hotkey settings, do the following:

1. Invoke HSM (see p. 12).
2. Press and release the F4 function key.
3. Open a text editor or word processor and use its Paste function to display the settings.

USB Reset

If the Console USB keyboard and/or mouse loses focus and needs to be reset, do the following:

1. Invoke HSM (see p.12).
2. Press and release the F5 function key.

Hotkey Beeper Control

The Beeper can be hotkey toggled On and Off. To toggle the Beeper, do the following:

1. Invoke HSM (see p.<xref>).
2. Press and release the B key.

The Beeper toggles On or Off. The Command Line displays Beeper On or Beeper Off for one second, then the message disappears and you automatically exit Hotkey Mode.

Disable Port Switching Keys

To disable the Port Switching Keys ([Scroll Lock] [Scroll Lock] / [Ctrl] [Ctrl]), do the following:

1. Invoke HSM (see p. 12).
2. Press [X] [Enter].

Restore Default Settings

To reset the SV231USBAN / SV431USBAN to its default hotkey settings, do the following:

1. Invoke HSM (see p.12).
2. Press [R] [Enter].

Invoke Firmware Upgrade Mode

To set the SV231USBAN / SV431USBAN to Firmware Upgrade Mode, do the following:

1. Invoke HSM (see p.12).
2. Key in: upgrade
3. Press [Enter].

The front panel port LEDs flash to indicate Firmware Upgrade Mode is in effect.

Please Note: To exit Firmware Upgrade Mode, you must power off the switch.

HSM Summary Table

Key	Function
H	Toggles between the default and alternate HSM invocation keys.
T	Toggles between the default and alternate Port Switching keys.
F2	Sets the Mac keyboard operating platform
F3	Sets the Sun keyboard operating platform
F4	Lists the current hotkey settings via the Paste function of a text editor or WP.
F5	Performs a USB reset.
F10	Auto detects keyboard operating platform (PC compatible systems). Activates Pass Through keyboard mode (keystrokes sent directly to computer instead of through Mac or Sun emulator).
B	Toggles the beeper On and Off.
X [Enter]	Enables/Disables the Port Switching keys.
R [Enter]	Resets the hotkey settings to their default status.
upgrade [Enter]	Invokes Firmware Upgrade Mode.

Keyboard Emulation

Mac Keyboard

The PC compatible (101/104 key) keyboard can emulate the functions of the Mac keyboard. The emulation mappings are listed in the table below:

PC Keyboard	Mac Keyboard
[Shift]	Shift
[Ctrl]	Ctrl
⊞	⌘
[Ctrl] [1]	
[Ctrl] [2]	
[Ctrl] [3]	
[Ctrl] [4]	
[Alt]	Alt
[Print Screen]	F13
[Scroll Lock]	F14
ÿ	=
[Enter]	Return
[Backspace]	Delete
[Insert]	Help
[Ctrl] ⊞	F15

Please Note: When using key combinations, press and release the first key (Ctrl), then press and release the activation key.

Sun Keyboard

The PC compatible (101/104 key) keyboard can emulate the functions of the Sun keyboard when the Control key [Ctrl] is used in conjunction with other keys. The corresponding functions are shown in the table below:

PC Keyboard	Sun Keyboard
[Ctrl] [T]	Stop
[Ctrl] [F2]	Again
[Ctrl] [F3]	Props
[Ctrl] [F4]	Undo
[Ctrl] [F5]	Front
[Ctrl] [F6]	Copy
[Ctrl] [F7]	Open
[Ctrl] [F8]	Paste
[Ctrl] [F9]	Find
[Ctrl] [F10]	Cut
[Ctrl] [1]	
[Ctrl] [2]	
[Ctrl] [3]	
[Ctrl] [4]	
[Ctrl] [H]	Help
	Compose
	♦

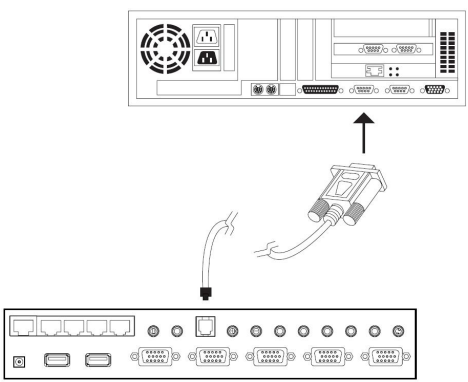
Please Note: When using key combinations, press and release the first key (Ctrl), then press and release the activation key.

The Firmware Upgrade Utility

The Windows-based Firmware Upgrade Utility (FWUpgrade.exe) provides a smooth, automated process for upgrading the KVM switch's firmware.

The Utility comes as part of a Firmware Upgrade Package that is specific for each device. New upgrade packages are posted on our web site as new firmware revisions become available.

1. From a computer that is not part of your KVM installation go to the product listing for the appropriate switch, on our website (**http://www.startech.com**), and click on Downloads.
2. Download the most recent file, if newer than the software currently installed, and extract from the containing (compressed) folder.
3. Use the Firmware Upgrade Cable provided with this unit, to connect a COM port on your computer to the Firmware Upgrade Port of your switch:



4. Unplug the KVM cables from the back of the switch.
5. Invoke Firmware Upgrade Mode (see p.16). The switch's front panel
6. LEDs flash to indicate that it is in Firmware Upgrade Mode.

Starting the Upgrade

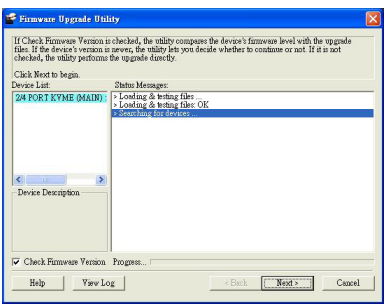
Please Note: The screenshots in this section are for example purposes. The screens that appear during your firmware upgrade may vary slightly as to their wording and descriptions.

To upgrade your firmware:

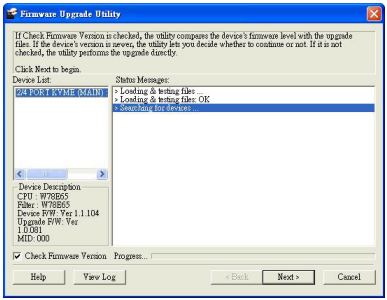
1. Run the downloaded Firmware Upgrade Package file - either by doubleclicking the file icon, or by opening a command line and entering the full path to it.

   The Firmware Upgrade Utility will begin to extract the files necessary for installation:

2. The Firmware Upgrade Utility main screen appears

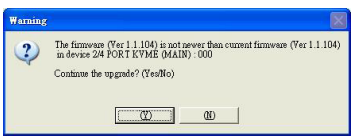

Firmware Upgrade Utility
If Check Firmware Version is checked, the utility compares the device's firmware level with the upgrade files. If the device's version is newer, the utility lets you decide whether to continue or not. If it is not checked, the utility performs the upgrade directly.
Click Next to begin.
Device List:
Status Messages:
2/4 PORT KVME (MADI)
> Loading & testing files ...
> Loading & testing files: OK
> Searching for devices ...
Device Description
Check Firmware Version
Progress...
Help
View Log
< Back
Next >
Cancel

- The Utility inspects your installation. All the devices capable of being upgraded by the package are listed in the Device List panel.
- As you select a device in the list, its description appears in the Device Description panel (shown following page)


Firmware Upgrade Utility
If Check Firmware Version is checked, the utility compares the device's firmware level with the upgrade files. If the device's version is newer, the utility lets you decide whether to continue or not. If it is not checked, the utility performs the upgrade directly.
Click Next to begin.
Device List:
Status Messages:
2/4 PORT KVME (MAIN)
> Loading & testing files ...
> Loading & testing files: OK
> Searching for devices ...
Device Description
CPU : W78E65
Filter : W78E65
Device F/W: Ver 1.1.104
Upgrade F/W: Ver 1.0.081
MID: 000
Check Firmware Version
Progress...
Help
View Log
< Back
Next >
Cancel

3. After you have made your device selection(s), Click **Next** to perform the upgrade.

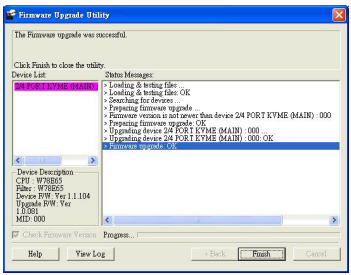
- If you enabled Check Firmware Version, the Utility compares the device's firmware level with that of the upgrade files. If it finds that the device's version is equal to, or higher than the upgrade version, it brings up a dialog box informing you of the situation and gives you the option to Continue or Cancel.


Warning
The firmware (Ver 1.1.104) is not newer than current firmware (Ver 1.1.104) in device 2/4 PORT KVME (MAIN) : 000
Continue the upgrade? (Yes/No)
(Y)
(N)

- If you didn't enable Check Firmware Version, the Utility installs the upgrade files without checking whether they are a higher level, or not.
- As the Upgrade proceeds status messages appear in the Status Messages panel, and the progress toward completion is shown on the Progress bar.

Upgrade Succeeded

After the upgrade has completed, a screen appears to inform you that the procedure was successful:


Firmware Upgrade Utility
The Firmware upgrade was successful.
Click Finish to close the utility.
Device List:
2/4 PORT KVME (MAIN)
Status Messages:
> Loading & writing files ...
> Loading & writing files: OK
> Searching for devices ...
> Preparing firmware upgrade ...
> Firmware version is not newer than device 2/4 PORT KVME (MAIN) : 000
> Preparing firmware upgrade: OK
> Upgrading device 2/4 PORT KVME (MAIN) : 000 ...
> Upgrading device 2/4 PORT KVME (MAIN) : 000: OK
> Firmware upgrade: OK
Device Description
CPU : W78E65
Files : W78E65
Device F/W Ver:1.1.104
Upgrade F/W Ver
: 0.501
MID: 000
Check Firmware Version
Progress...
Help
View Log
< Back
Finish
Cancel

Click Finish to close the Firmware Upgrade Utility.

After a successful completion, the switch exits Firmware Upgrade Mode and resets itself.

Upgrade Failed

If the Upgrade Succeeded screen doesn't appear, it means that the upgrade failed to complete successfully, in which case you should repeat the upgrade procedure from the beginning.

Specifications

Function		SV231USBAN	SV431USBAN
Computer Connections		2	4
KVM Port Selection		Front Panel Switches; Hotkey	
USB/Audio Port Selection		Hotkey	
Console Connectors	**Keyboard**	1 x USB Type A female	
	Mouse	1 x USB Type A female	
	Video	1 x HDB -15 female	
	Audio	1 x Speaker jack 1 x Microphone jack	
Computer Connectors	**KVM data**	2 x SPHD - 15 female	4 x SPHD - 15 female
	Audio	2 x Speaker jacks 2 x Microphone jacks	4 x Speaker jacks 4 x Microphone jacks
Firmware Upgrade Port		1 x RJ- 11socket	
Hubs	**USB**	2 x USB Type A female	
	Ethernet	3 x RJ-45 sockets	5 x RJ-45 sockets
LEDs	**KVM**	2 (Orange)	4 (Orange)
	USB	2 (Green)	4 (Green)
	Link	3 (Green)	5 (Green)
	10/100Mbps	3 (Green)	5 (Green)

Specifications - cont'd

Function		SV231USBAN	SV431USBAN
KB/Mouse Emulation		USB (PC, Mac, Sun)	
Video		Up to 2048 x 1536; DDC2B	
Scan Interval		1 - 99 secs. (5 secs. default)	
Power Consumption		DC5.3V; 4.5W; 900mA	DC5.3V; 5W; 1000mA
Power Adapter		1 x DC 5.3V; 2.4A	
Environment	**Operating Temp.**	0 - 50°C	
	Storage Temp.	-20 - 60°C	
	Humidity	0 - 80% RH	
Physical Properties	**Housing**	Metal	
	Weight	0.71 kg	0.92 kg
	L x W x H	21.0 x 8.8 x 5.55cm	27.0 x 8.8 x 5.55cm
OS Support		Windows 98 or higher, Mac OS 8.6 or higher, SUN Blade 2000/100 (Sun Solaris 8), Linux RedHat 7.1 or higher, FreeBSD 3.51, 4.2, 4.3, 4.5 or newer	

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